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| 09/384,326 | 08/26/1999 | SEISHIRO YOSHIOKA | 35.C5745-CIP | 7618 |

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EXAMINER

DAY, MICHAEL HENRY

ART UNIT PAPER NUMBER

2879

DATE MAILED: 01/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/384,326

Applicant(s)

S. Yoshioka et al.

Examiner

Michael Day

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/13/2002 & 8/21/2002
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42, 56-67, and 69-103 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-42, 56-67, and 69-103 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☒ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 07/218,203.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 25, 24
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

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DETAILED ACTION

1. Amendment F, and preliminary amendment G, filed 6/13/2002, and 8/21/2002, respectively, have been entered.

Oath/Declaration

2. In view of the fact that additional errors in the original patent have been corrected through amendments to the claims, a new/supplemental oath or declaration complying with 37 CFR 1.175(a)(1), (a)(2) and/or (a)(3), (a)(5), (a)(6), and (a)(7) is required. See *In re Constant*, 3 USPQ2d 1479.

3. Claims 1-42, 56-67, 69-103 are rejected as being based upon a defective reissue declaration under 35 U.S.C. 251 as set forth above. See 37 CFR 1.175.

The nature of the defects in the declaration is set forth in the discussion above in this Office action.

Claim Objections

4. Claims 70-72 are objected to because of the following informalities: The subject claims do not depend from a proceeding claims as required by 37 CFR 1.75(c). Here it would appear that the applicant intended for claims 70-72 to depend from claim 69, and claims 100-102 to depend from claim 73. Appropriate correction is required.

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Recapture of Canceled Subject Matter

5. The applicant's arguments in the first paragraph on page 12 of amendment F, filed 6/13/2002, are compelling. The rejection of claims 69-72, and 74-84 under 35 U.S.C. 251 as being an improper recapture of claimed subject matter deliberately canceled in the application for the patent upon which the present reissue is based is hereby withdrawn. The new claims are neither identical, nor substantially similar, to the canceled claims of the parent application.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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7. Claims 69-77, 85-92, and 100-103 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Tomii et al. Tomii et al. disclose a display device as claimed. See FIG. 3, 4, 8, and respective portions of the specification.

Referring to claims 69, and 70, Tomii et al. disclose a display device including, and electron source plate having a substrate 10 and a plurality of electron-emitting devices arranged in a matrix (see FIG. 3) of row wires (electrodes 15) and column wires (members 11a, 11b), a fluorescent device plate (faceplate 217) having a fluorescent layer (fluorescent film 216P) and an accelerating electrode (metal-backed film 216M), a housing having a structure for maintaining a vacuum-packed (see col. 7, lines 3-10) at least a portion of said structure formed by the electron source plate and the fluorescent device plate (see FIG. 7, col. 3, lines 48-50, col. 6, lines 19-21, and col. 7, lines 61-65), and a voltage applier (see FIG. 4, driver circuit 28, 29) disposed outside the housing for applying a scan signal to the row wires and a modulation signal to the column wires (see col. 8, lines 10-12) and an acceleration voltage to the acceleration electrode (see col. 8, lines 44-48).

Referring to claim 71, see col. 5, lines 30-68.

Referring to claim 72, Tomii et al. disclose a display device of claim 69 wherein the fluorescent layer (fluorescent film 216P) includes RGB fluorescent members (216R, 216B, 216B).

Claim 73 is rejected for the same reason as claim 69.

Referring to claims 74-77, see col. 8, lines 34-48, focusing electrode 215.

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Referring to claim 85, Tomii et al. disclose a display device including, and electron source plate having a substrate 10 and a plurality of electron-emitting devices arranged in a matrix (see FIG. 3) of row wires (electrodes 15) and column wires (members 11a, 11b), a fluorescent device plate (faceplate 217) having a fluorescent layer (fluorescent film 216P) and an accelerating electrode (metal-backed film 216M), a housing having a structure for maintaining a vacuum (see col. 7, lines 3-10) at least a portion of said structure formed by the electron source plate and the fluorescent device plate (see FIG. 7, col. 3, lines 48-50, col. 6, lines 19-21, and col. 7, lines 61-65), and leads (see FIG. 3, and col. 6, lines 19-21, lead members 11a, 11b and bus 1a) disposed outside the housing for applying a scan signal to the row wires and a modulation signal tot the column wires (see col. 8, lines 10-12) and an acceleration voltage to the acceleration electrode (see col. 8, lines 44-48).

Claims 86-92 are rejected for the same reasons as claims 70-72, 74-77, respectively.

Claims 100-102 are rejected for the same reasons as claims 70-72, respectively.

Referring to claim 103, Tomii et al. disclose a display device of claim 69 wherein the fluorescent device plate (faceplate 217) includes a laminated layer having the fluorescent layer (fluorescent film 216P) and the accelerating electrode (metal-backed film 216M).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 78-80, and 93-95 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomii et al. in view of Hoeberchts.

Referring to claim 78-80, Tomii et al. disclose a display device of claim 73. Tomii et al. do not disclose a display device wherein the electron emitting device includes carbon. Hoeberchts disclose an electron emitting device including carbon for improved emission properties. See Col. 4, lines 29-34. It would have been obvious to include a carbon layer, as disclosed by Hoeberchts, on the electron emitters, as disclosed by Tomii et al., for the purpose of improved electron emission. It is the position of the examiner that the SP2 carbon bonds (graphite) inherently results in a non-homogenous layer with electrical discontinuities.

Claims 93-95 are rejected for the same reasons as claims 78-93.

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Double Patenting

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper extension of the exclusionary right granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.d. 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claims 81-84, and 96-99 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2, and 4 of U.S. Patent No. 5,066,883 by Yoshioka et al. in view of Tomii et al. Referring to claims 81-84, Yoshioka et al. ('883) recites in claim 1 an electron-emitting device substantially as presently claimed. While the subject limitation are not verbatim identical, one skilled in the art would recognize that the subject limitation are directed to the same inventive electron emissive device. Yoshioka et al. ('883) do not claim the electron emissive device disposed in an display apparatus. Tomii et al. disclose a display device as recited in base claim 73. It would have been obvious to include the electron source, as disclosed by Yoshioka et al., instead of the electron source, as disclosed by Tomii et al. because the two sources are art recognized equivalents for producing electrons.

Claims 96-99 are rejected for the same reasons as claims 81-84.

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Response to Arguments

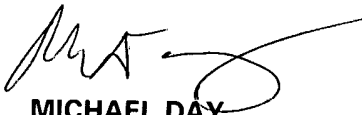
12. Applicant's arguments with respect to claim 69 have been considered but are moot in view of the new grounds of rejection.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Day whose telephone number is 703/305-4941. The examiner can normally be reached on Monday-Friday, from 8:00 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar Patel, can be reached by phoning 703/305-4794. The Fax phone number is 703/308-7382.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is 703/308-0956.

January 2, 2003


MICHAEL DAY
PRIMARY EXAMINER
GROUP 2870